

**ABSTRACT OF THE DISCLOSURE**

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2       A mass transfer device having a fluid permeable core wound  
3 with many stands of a hollow fiber. A bulk fluid enters the  
4 interior of the core, passes through the side wall of the core,  
5 and along the outer surfaces of the hollow fibers. A baffle  
6 positioned in the center of the core so that the bulk fluid  
7 passes outwardly upstream of the baffle and inwardly through the  
8 core along the downstream of the block.